

Clean Set of Amended Claims

1. (Amended) An image projector comprising:

a lamp for emitting beams of lights, wherein the lamp includes an elliptical reflector that focuses beams of light onto a surface in front of the lamp;

a color wheel for splitting particular color beams in succession from the beams of lights;

a rod lens for making distribution of the color beams from the color wheel uniform, wherein the rod lens has an optical input surface with an area greater than an optical output surface;

a polarized beam converter for converting the color beams into beams of a particular pole;

an optical system for focusing the color beams converted into beams of a particular pole;

a reflection-type display for producing a picture beam of a video signal according to the video signal by using the color beams from the optical system;

a polarization beam splitter prism between the optical system and the display for reflecting the color beams from the optical system and transmitting the picture beams from the display; and,

a projection lens for enlarging, and projecting the picture beams.

6. (Amended) An image projector as claimed in claim 1, wherein the rod lens is tapered from an optical input surface to an optical output surface.

7. (Amended) An image projector as claimed in claim 1, wherein the polarized beam converter includes:

at least one illumination lens for receiving the color beams from the rod lens and focusing onto a plurality of beam focusing points, and

a polarization beam sprite array for converting the color beams into beams of a particular pole.

13. (Amended) An image projector as claimed in claim 1, further comprising:
a $1/4$ wavelength plate between the polarization beam sprite prism and the display;

a polarizing plate between the polarization beam sprite prism and $1/4$ wavelength plate; and

a $1/2$ wavelength plate between the polarizing plate and the $1/4$ wavelength plate.

15. (Amended) An image projector comprising:
a lamp for emitting beams of lights, wherein the lamp includes an elliptical reflector that focuses beams of light onto a surface in front of the lamp;

a color wheel for splitting particular color beams in succession from the beams of lights;

a rod lens for making distribution of the color beams from the color wheel uniform, wherein the rod lens has an optical input surface with an area greater than an optical output surface;

a polarized beam converter for converting the color beams into beams of a particular pole;

an optical system for focusing the color beams converted into beams of a particular pole;

a transmission-type display for producing a picture beam of a video signal according to the video signal by using the color beams from the optical system; and,

a projection lens for enlarging, and projecting the picture beams.

17. (Amended) An image projector as claimed in claim 15, wherein the display includes polarizing plates fitted in front and rear of the display.

C. Please add new claims 24-27 as follows:

24. (New) A projector, comprising:

a light source;

a color filter that filters light from the light source;

a tapered rod lens which receives light from the color filter;

a polarizing array, wherein the tapered rod lens is between the color filter and the polarizing array;

a prism, wherein the polarizing array is between the tapered rod lens and the prism; and

a projection lens, wherein the prism is between the polarizing array and the projection lens.

25. (New) The projector of claim 24, wherein the tapered rod lens comprises an optical output surface and an optical input surface, wherein the optical output surface has a smaller area than the optical input surface.

26. (New) The projector of claim 25, wherein the rod lens causes light from the filter to create a plurality of focusing dots on the polarizing array.

27. (New) The projector of claim 24, wherein the polarization array comprises:
- polarization beam split planes;
 - polarization beam reflection plates; and
 - half wavelength plates attached to an optical output surface of the polarization beam split planes.
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